

## IO-Power IOP-SCBP-D24O96-1

### Outdoor 12~24VDC Series Connection Boost Protector

### Support Series In-line Boost 48V Voltage and Separate Power Supply Protection



The IOP-SCBP-D24O96-1 is a special design for people who need more battery power and high voltage and large current capacity design of system requirements through electrical series booster design pattern, with a separate access to the isolated circuit design, meet the in-line booster function, while avoiding general series in-line boost voltage on the battery caused by injuries, resulting in damage batteries used in series.

The IOP-SCBP-D24O96-1 is outdoor 12~24VDC series connection boost protector, specially designed multi ports in-line automatic step-up design:

Insert 2 x 12~24VDC power supply voltage in series, the output voltage automatic step-up 24~48VDC power supply

Insert 3 x 12~24VDC power supply voltage in series, the output voltage automatic step-up 36~72VDC power supply

Insert 4 x 12~24VDC power supply voltage in series, the output voltage automatic step-up 48~96VDC power supply

Insert different voltage power supply voltage in series, will automatically output superposition of voltages on the power supply, but should not be more than the total voltage 100VDC.

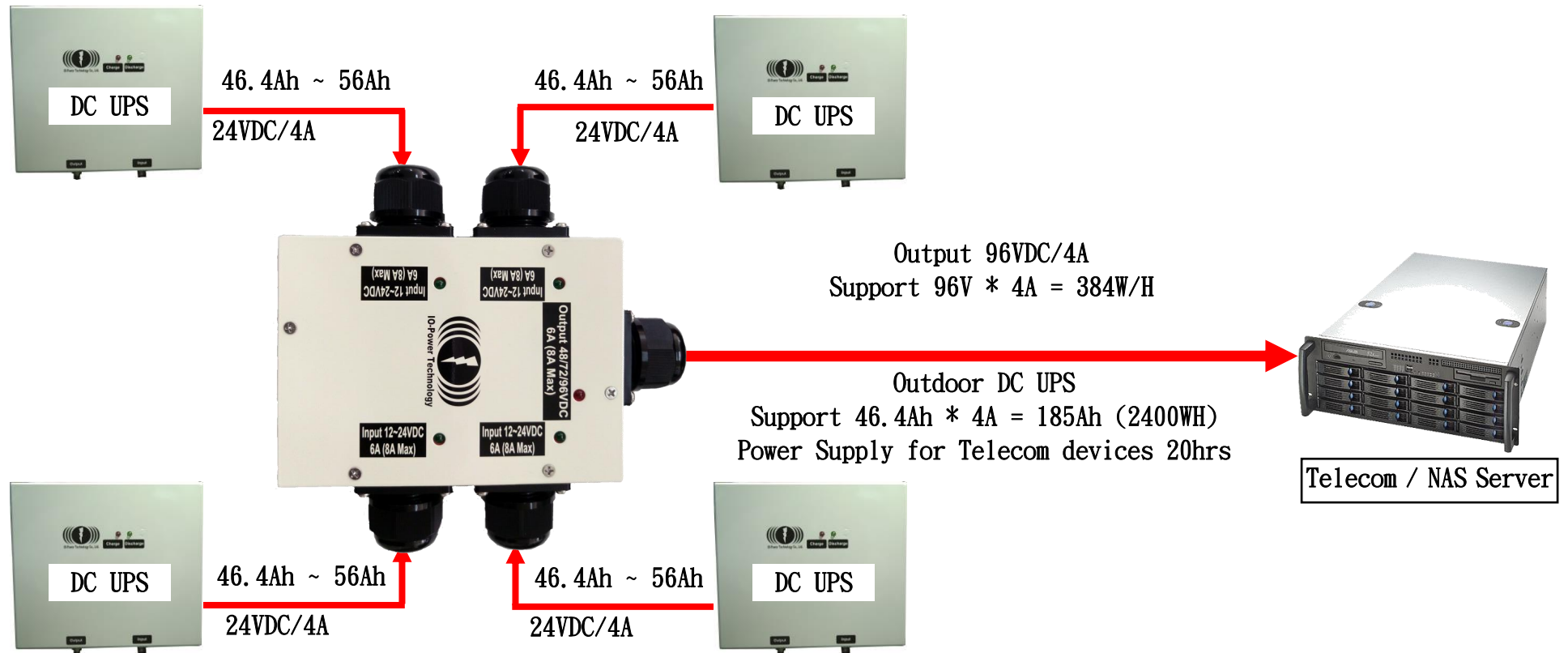


Series booster design patterns through electricity, the IOP-SCBP-D24O96-1 can enter 12 ~ 24VDC 6A (instant max 8A) per port, but the maximum stack voltage could not exceed 100VDC. After the series voltage increases, the total output current can still reach 4A (instantaneous maximum 6A), equivalent to output  $96\text{VDC} * 4\text{A} = 384\text{W} / \text{H}$  (instant maximum  $96\text{VDC} * 6\text{A} = 576\text{W} / \text{H}$ ). For outdoor operating systems that require significant power consumption, they can truly meet the needs of large power applications such as indoor and outdoor telecommunications systems, outdoor communication systems; emergency broadcast systems, wireless network systems, outdoor surveillance video systems, outdoor detection and management System ... etc.

Outdoor 12~24VDC series connection boost protector, in addition to general power series step-up operation applied to outside power supply, especially when the mix of outdoor power systems, separate charge mode with separate input reverse current protection, would not result in UPS power systems battery damage. Even has a size of battery capacity or battery low voltage differences, The IOP-SCBP-D24O96-1 Outdoor 12~24VDC series connection boost protector, will be able to offer mutual isolation and reverse protection and access protection features such as excessive discharge.

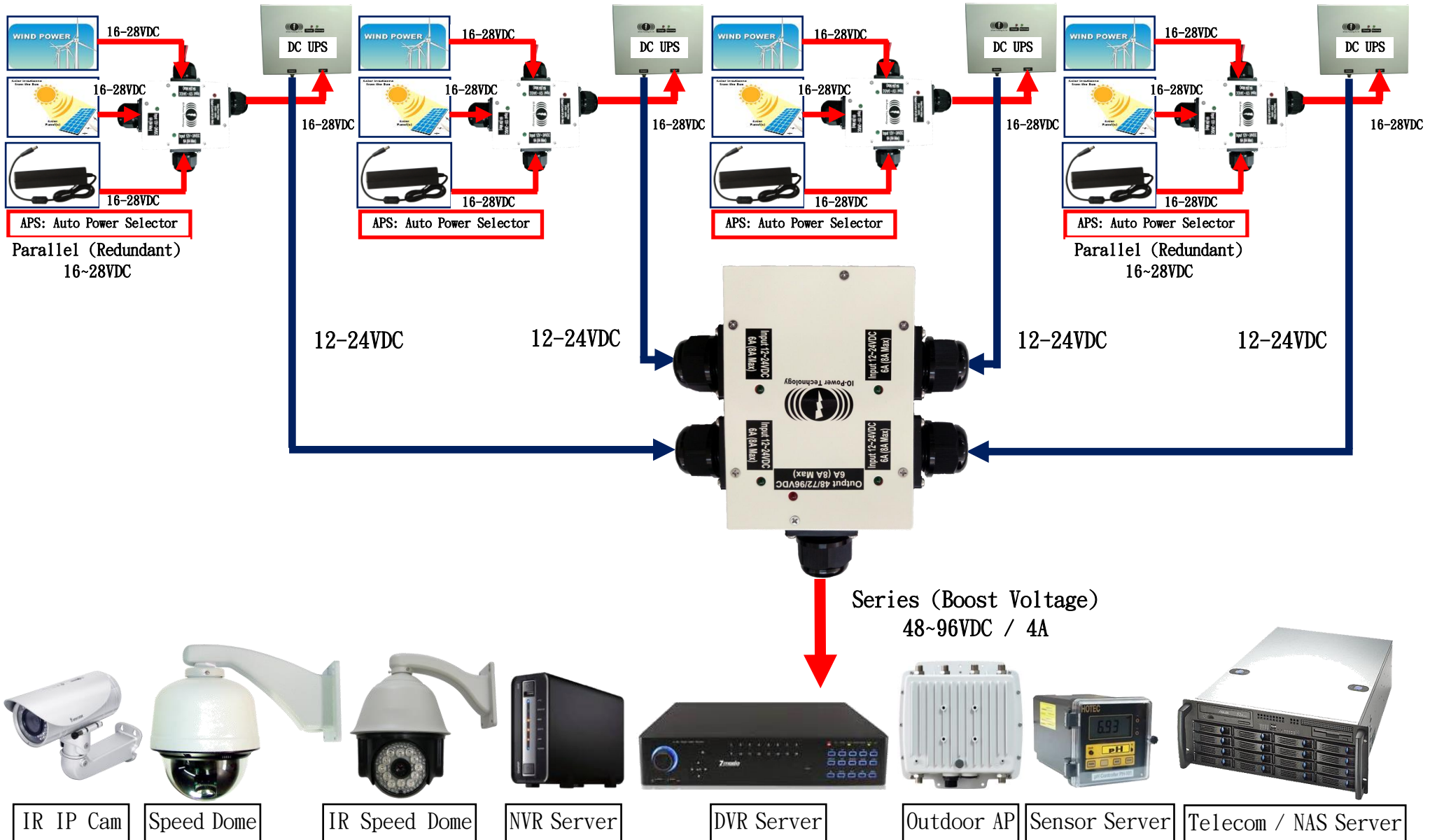
The IOP-SCBP-D24O96-1 Outdoor 12~24VDC series connection boost protector, Crashworthiness Design reinforced metal case with IP67 water and dust proof design and sustainable design of product temperature  $-40 \sim +70^{\circ}\text{C}$ , even if they are placed in the sunshine hot outdoor environment remains normal and stable work. Each output port rubber beam head for high temperature corrosion protection IP68, tying can be achieved without lines when connected to the fixed effects. For the installation, operation and safe use of outdoor environment, design separate short-circuit and reverse polarity protection and shock lightning surge protection (30V 1500W), meet a variety of safety requirements for power imports.

# SCBP for Telecom System Back up Power Solution Applications Diagrams

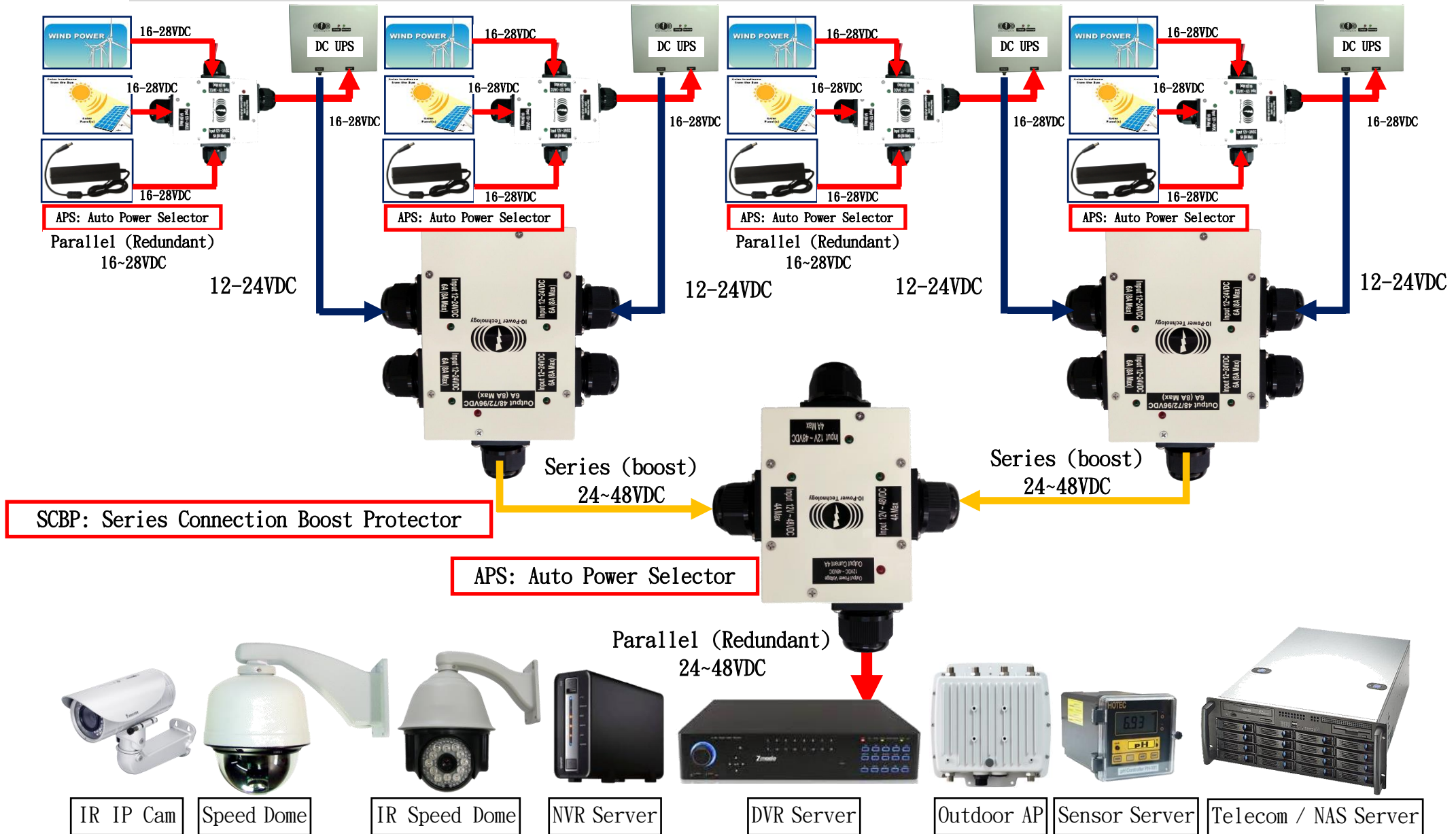


Insert 2 x 12~24VDC power supply voltage in series, the output voltage automatic step-up 24~48VDC power supply  
 Insert 3 x 12~24VDC power supply voltage in series, the output voltage automatic step-up 36~72VDC power supply  
 Insert 4 x 12~24VDC power supply voltage in series, the output voltage automatic step-up 48~96VDC power supply


# SCBP - Series Connection Boost Protector Multi-applications Diagrams 01



# SCBP - Series Connection Boost Protector Multi-applications Diagrams 02



# IOP-SCBP-D24O96-1 Specification

Model	IOP-SCBP-D24O96-1
<p>Outdoor 12~24VDC Series Connection  Boost Protector  (SCBP)    Iron Airtight Housing  IP 67</p>	
<p>Input DC Voltage</p>	<p>Each Port Input 12~24VDC (Maximum input voltage per port is 28VDC)</p>
<p>Input DC Current</p>	<p>Each Port Input 12~24VDC 6A (Instant 8A max)</p>
<p>Output DC Voltage</p>	<p>12VDC + 12VDC = 24VDC  12VDC + 12VDC + 12VDC = 36VDC  12VDC + 12VDC + 12VDC + 12VDC = 48VDC  24VDC + 24VDC = 48VDC  24VDC + 24VDC + 24VDC = 72VDC  24VDC + 24VDC + 24VDC + 24VDC = 96VDC    (Series concatenation every port will reduce the voltage 0.1VDC~0.5VDC)  The product by serial isolation protect design, so you can take series concatenation upgrade voltage mode using the stack, serial output voltage required is lower than 100VDC. Series</p>



	concatenation upgrade over 100VDC voltage output, will produce temperatures rising issues, long-term use may result in damage to the product.
<b>Output DC Current</b>	Series connection 4A output current (Instant 6A max). Concatenation of input power required special attention, each input port are subject to maximum current requirements relative to the output port. Input current >= for each port output current.
<b>Input DC Power Connector</b>	DC Female Jack Connector * 4 ; Pin OD: 2.0mm,& Support 8A Max
<b>Output DC Power Connector</b>	DC Female Jack Connector * 1 ; Pin OD: 2.0mm,& Support 8A Max
<b>Transform Efficiency</b>	95%~
<b>Power mode of operation</b>	Stacked series by upgrade voltage-mode, elevated series voltage to maintain the same current modes of operation The product by serial isolation protect design, it can protect all the output power supply side or charging UPS's battery side and power operation protection
<b>Protection</b>	Input power overcurrent protection Input power supply over high voltage protection Short circuit protection Imported power polarity protection for anti-welding Surge protect for each port (30V/200A/6KV 1500W) Input port reverse current block Output port reverse current block
<b>Industrial Housing &amp; Connector</b>	Iron Airtight Housing IP 67 Gland Connector



<b>Connector Type</b>	Input DC Power Source: 12~24VDC 6A, Instant 8A max, DC Female Jack Connector * 4 ; Pin OD: 2.0mm Output DC Power Port: 48~96VDC 100VDC Max, 4A, Instant 6A max, DC Female Jack Connector * 1 ; Pin OD: 2.0mm (Series Connection will drop about 0.1VDC~0.5VDC by each port)
<b>LED Display</b>	Input DC Power Source: 4 Green Color LEDs Output DC Power Port: 1 Red Color LED
<b>Operating Temperature</b>	-40°C ~ +70°C (Use or storage at -40°C environment, please be sure to inform in advance, related accessories and wires should be replaced; Recommends that the equipment will be installed in the power distribution box)
<b>Storage Temperature</b>	-40°C ~ +70°C (Use or storage at -40°C environment, please be sure to inform in advance, related accessories and wires should be replaced)
<b>Rel. Humidity</b>	10~95%RH
<b>Dimension</b>	195mm(L) x 185mm(W) x 45mm(H)
<b>Weight</b>	0.8Kg
<b>Housing Waterproof</b>	IP67
<b>Approvals</b>	CE FCC in progress
<b>Installation</b>	1.Street lamp pole mount or Upright pole mount 2.Wall mount installation
<b>Warranty</b>	12 months

Ps 1: Product specifications change, without notice, consultation with agent or dealer before buying the latest specifications